



Farm Restructuring in Transition: Land Distribution in Russia

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**CASE STUDY #7-7 OF THE PROGRAM:
“FOOD POLICY FOR DEVELOPING COUNTRIES: THE ROLE OF
GOVERNMENT IN THE GLOBAL FOOD SYSTEM”
2007**

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Executive Summary

The agrarian reform of the 1990s in Russia was targeted at transforming the formerly state-owned and centrally planned agriculture sector to a market-oriented one. The reform dramatically changed farm structure and land tenure in rural areas. The preconditions of the reform prohibited land restitution, as took place in many Eastern and Central European countries in transition. Instead, the major instrument of Russian reform was land sharing based on the allocation of conditional land shares, which were not indicated on the ground, to the rural population. This fragmentation of landownership was not coupled with the fragmentation of farming operations: the big farm enterprises were preserved but had to rent small land shares from their holders. Moreover, in the late 1990s huge agribusiness companies entered Russia's agricultural sector and rented hundreds of thousands of hectares for cultivation.

Agricultural growth started to recover after 1998, but a severe contradiction between the system of fragmented land tenure and the prevailing large-scale farm structure remained. For agribusiness investors, the process of gaining access to land had become costly and prolonged, hampering the growth of investment, and consequently, growth in the agrifood sector.

The complicated systems of land registration laid a foundation for rent-seeking activity in land administration across the country, aggravating the problem of high transaction costs in the farmland market. On the other hand, the land share system provided the millions of rural dwellers with an additional source of income that was crucial given the severe fall in living standards stemming from the reforms in the countryside. The objective of increasing the efficiency of agriculture by consolidating land ownership thus contradicts the objective of protecting the civil rights of millions of land shareholders who were allotted their shares in the early 1990s.

Around this problem four groups of stakeholders were formed. Domestic and foreign agribusiness investors are interested in consolidating land shares in farm enterprises and simplifying the land registry system. The land shareholders are also interested in reducing land transaction costs, but most of them have benefited from the possession and disposal of

shares. The private firms that offer consulting and land engineering services are profiting from the existing land registry system, land transactions, and plurality of parties in farmland transactions. The land bureaucracy has a strong background of rent seeking in existing land tenure arrangements.

Policy makers are debating several political options, some of which have already been introduced. The political challenge raised here is a typical one for the policy-making process—the contradiction between efficiency and social justice. The challenge is to find a compromise political decision that would balance the objective of economic growth in agriculture, which may require consolidating farmland in the hands of producers (which are mainly large in scale), with the objective of protecting the property rights of land shareholders, for many of whom these shares provide an important source of income.

Your assignment is to find a political solution that will (1) make agriculture attractive for investors (domestic and international) by simplifying land transaction procedures, and (2) secure the rights of rural dwellers who received land shares through the reforms. Take into account the farm structure and land tenure systems that emerged in Russia after the agrarian reforms of the 1990s, current stakeholders' interests and the distribution of political forces in Russia, and the possible opposition to change by rent seekers in the land registration system.

Background

Russia, along with 27 other post-communist countries, undertook massive social and economic reforms in the early 1990s in an ambitious effort to shift from a centrally planned economy to a market economy. Agricultural transformation was an essential part of this transition, and one of the major goals of this transformation was establishing a new form of agricultural production.

Table 1: *Kolkhozes and Sovkhozes in Russia, 1987*

Characteristic	Kolkhozes	Sovkhozes
Number of enterprises	12,124	12,810
Average arable land per enterprise (thousand hectares)	7.1	9.6
Average number of cattle per enterprise	1,930	2,018
Average number of employees per enterprise	354	461

Source: CSU 1988, 444–461.

Production Units in Soviet Agriculture

The agricultural system of the Union of Soviet Socialist Republics (USSR)¹ was formed in the 1930s during the collectivization process. At that time all individual peasant farms across the country were forcibly merged into collective farms (*kolkhozes*). The estates of large landlords were usually transformed into state farms (*sovkhozes*). Throughout the Soviet era, the *kolkhozes* and *sovkhozes* were frequently reorganized, merged, redivided, and transformed into one another, and thus by the end of that period they were almost indistinguishable. They were large agricultural enterprises with state-appointed managers and many employees (Table 1).

The farmlands were nationalized and allotted to these enterprises for permanent use, free of charge. *Kolkhozes* and *sovkhozes* also had other endowments from the state and had to produce in accordance with strict production targets set by the state bodies. Prices for agricultural inputs (such as machinery, chemicals, power, fuel, and fodder), outputs, and wages were set by the state. Farm profits were not an incentive for performance but rather merely the difference between state input and output prices. The major goal of production was to meet state targets. Naturally, such production units could not function in a market environment.

Besides *kolkhozes* and *sovkhozes*, there was another form of production in Soviet agriculture. In the process of collectivization, the peasants had been allowed to keep tiny plots and some livestock for subsistence needs. For decades these household

farms were the means of survival for millions of peasants. A portion of the output from these household plots could be sold at town markets. Prices at these markets were regulated by demand and supply rules and were higher than state-regulated prices. By the end of the Soviet period, household farms produced around one-third of the country's overall agricultural output, although this share varied by region, increasing from the north to the south. Households sold less than 13 percent of their produce, however, and the share of household output in total marketed output was negligible.

The Collapse of the Soviet System of Agriculture

Soviet agriculture was always characterized by poor development. Agricultural productivity in Russia was very low for an industrial country, and food shortages were becoming an increasingly acute problem. In the final years of Soviet power, the situation with regard to agriculture and the food industry continued to deteriorate, with annual growth rates close to zero. The gap between artificially low retail prices for food products and steadily growing producer prices (combined with growing nominal household income) led to the need for both consumer and producer subsidies. These subsidies to the agricultural sector and consumers accounted for one-third of national expenditures and were rapidly becoming an unbearable burden for the country. Gas and oil exports had been the major source of funding for food subsidies for two decades, so the budget problem was further aggravated by the drop in world gas and oil prices in the mid-1980s.

¹ Russia was one of 15 constituent parts of the former USSR and became independent after the break-up of the USSR in 1991.

Intensified attempts to reform the agricultural sector in the 1980s did not yield even temporary success, and the crisis in agriculture became a major contributor to the country's overall social and economic decline. Systemic reform of Russia's agriculture became an urgent national task. The primary objectives were to facilitate a fundamental change in agrarian relations in order to create an efficient sector and to relieve the budget burden imposed by the agrifood system (OECD 1998; World Bank 1993).

Difficulties of Farm Restructuring

The transformation of *kolkhozes* and *sovkhozes* into market production units was hampered by a number of circumstances.

First, after 70 years of collective agriculture, agricultural workers had become specialists who performed only one functional operation in farming, such as cultivating land, milking cows, or book-keeping. They had lost the capacity for individual farming requiring complex skills and habits. The generation that could run individual farms had gone long before the transition period started. Numerous polls of the end of the 1980s showed that no more than 5 percent of the rural population wished to run their own farms. In addition, after the long period of Soviet power, land restitution² in rural areas was practically impossible: property rights were untraceable, documents were lost in the historical turmoil, and huge expanses of farmland were occupied by expanding towns or under water reservoirs for power stations. Consequently, the heirs of the peasants whose lands had been nationalized in the collectivization process could not be compensated as they were in the majority of the Eastern and Central European countries.

Second, the entire rural infrastructure, including agricultural machinery manufactured in the country, was tailored to suit large-scale farms. Russia produced predominantly powerful tractors and wide-cut equipment; roads and engineering

infrastructure were adapted to the large-farm operations. This situation could not be changed overnight. Smaller, individual farms simply could not find the small and medium-sized machinery they needed for their plots. Detached from the parent collective or state farms, the individual farms were separated from the infrastructure and had to spend heavily to connect to power, water, and gas supply networks and to reach the main roads.

Third, the processing and food industry was also tailored to state-owned agriculture. In the paradigm of state-owned agriculture, there was no need for competition among purchasers of farm products. Therefore there was one dairy plant for each county³ and one slaughterhouse for every two to four counties. In the transition to the market system, these enterprises had naturally and immediately transformed into monopolies (or more precisely, monopsonies), which dictated terms of trade for the suppliers. A system of farmer cooperatives and commercial middlemen could not emerge overnight.

Under these circumstances it was not feasible to simply split collective and state farms into individual farms.

So after the break-up of the USSR in 1991, the new Russian government was faced with the severe problem of restructuring farms and privatizing farmland. The major tasks of this transformation were formulated as the following:

- to transfer farmland from state ownership to private ownership in a socially acceptable and economically rational way; and
- to transform *kolkhozes* and *sovkhozes* into market-oriented production units.

Policy Issues

Land-Sharing Policy

The Russian land reform and farm restructuring were based on a procedure called land sharing. The workers, as well as pensioners and social service officers, of the *kolkhozes* and *sovkhozes* received equal conditional shares in the land operation of

² Restitution is a legal process of returning or paying compensation for previously expropriated property. The collapse of communism in 1989–1991 made it possible to restore property in the former communist countries. Many countries enacted legislation to provide for the restitution of both private and communal property. In agriculture the most massive restitution effort was for land.

³ The lowest level of administrative unit in Russia is called a *rayon* and is analogous to the U.S. county.

the parent farms. The conditional shares were not marked on the ground and were to be considered as options. The holder had the right to withdraw with a physical plot at any time, without the permission of the other land shareholders; only the location of the plot had to be agreed upon. These land shares were transferable in all types of legal transactions and were inheritable. A person who accumulated a certain number of land shares could request from the parent farm a plot or plots of land equal to the total nominal size indicated in the shares.

In the reform of 1992–1994, around 12 million such shares were allotted to rural dwellers. The average size of the land shares varied significantly from region to region owing to uneven population density in different parts of Russia, but across the country shares averaged about six hectares. Because of the system of legally allowed land share transactions, the average size of family farms was bigger than one share—around 40 hectares per farm.

About 300,000 households exercised their right to withdraw from the farm enterprises and set up their own family farms. In the first years of the reforms, many people quickly withdrew from the *kolkhozes* and *sovkhozes*, but later the process stagnated, mainly owing to the reasons mentioned in the previous section (Table 2).

The rest of the rural dwellers preferred to maintain their original status as members of the *kolkhozes* and *sovkhozes*. In most cases they rented their land shares to the farm enterprises. Shareholders also had the option of contributing their land shares to the equity of these farms. In this case the shareholder would lose the right to claim a physical plot and instead become a shareholder of a joint stock company or co-op, but in practice shareholders rarely exercised this option.

The former *kolkhozes* and *sovkhozes* were gradually transformed into various types of business organizations. Originally the managers, workers, and pensioners owned these enterprises, but over time control of the stock was increasingly concentrated in the hands of top managers, and the enterprises were later acquired by outsiders.

Because of the country's weak legal culture and law enforcement, as well as its federal structure,⁴ the land-sharing arrangements were inadequately registered. The shareholders were not aware of the benefits and responsibilities of possession, and the farm enterprises that truly used the lands did not pay for this use. Moreover, lands shares that were leased to large farm enterprises were not identified on a map.

This situation changed slightly after a 1996 presidential decree obliged all users of land to sign legal contracts with the owners of the land shares. Since then, the average size of individual farms has grown through the leasing of land shares. There are no official data on land share transactions among farm enterprises, but anecdotal evidence suggests that this process has occurred as well. Obligated to sign the formal lease contracts, the land shareholders were encouraged to choose better lease conditions. As such, a quasi-market for land shares sprang up.

Further development of the situation occurred after a financial crisis in 1998. The fourfold Russian ruble devaluation caused a notable trend toward import substitution and led to significant growth in agriculture during the following years. Thanks to this growth, potential investors considered land more valuable and demand for land rose. Under these circumstances the conditional character of land shares played a positive role in the development of the land market. Attracted by high net returns in agriculture, the external farming sector investors began to acquire farmland for operation. On the other side, the rural dwellers who were land shareholders had become aware of the value of their land and thus preferred not to sell their shares but to rent them advantageously. Therefore, the leasing of land shares became a major form of land acquisition in this period.

⁴ Land tenure issues are a subject of both federal and regional legislation, and at the beginning of the reforms, a number of regions did not establish land-sharing arrangements on their territories.

Table 2: Development of Family Farms in Russia, First Years of the Reform

Characteristic	1991	1992	1993	1994	1995	1996	1997
Number of family farms (thousands)	49	182	270	279	280.1	279	274
Average size of plot (hectares)	41	42	43	43	43	44	48
Share of family farms in land use (%)	...	3.4	4.9	5.0	5.0	5.3	5.8
Share of family farms in gross agricultural output, (%)	...	1	2	2	2	2	2.1

Source: Calculated from Russian Cadastre Service data.

Note: ... indicates negligible.

Farm Structure

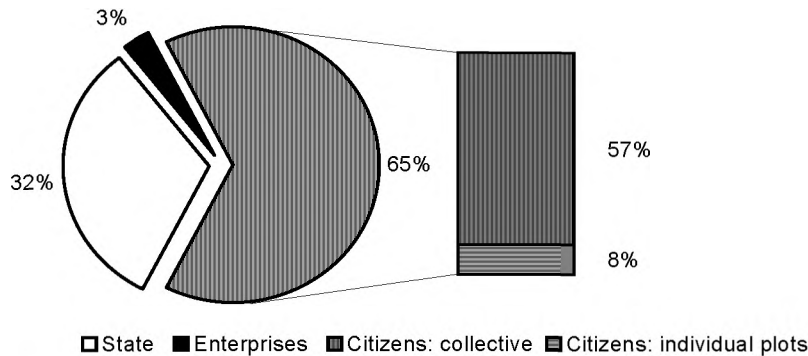
In this post-crisis period a new form of producer emerged that is quite different from the main types of agricultural producers in other post-Soviet economies. These are the large farm operations (up to 300,000 hectares in several regions—much bigger than traditional Soviet *kolkhozes* and *sovkhozes* and their current heirs) established with capital derived from outside the primary sector. Sometimes capital comes from a downstream sector (like processors, retailers, or middlemen) whose purchasers of agricultural raw materials want to invest in secure and reliable supplies. Sometimes it comes from an upstream sector (like manufacturers and suppliers of resources and services for the farming sector) whose suppliers tend to control the costs of inputs. Often capital originates completely outside the agrifood sector—mainly from the most profitable sectors of the Russian economy, such as fuel and energy, finance, and metallurgy. In some cases a holding company owns several farm enterprises, and in others the farm enterprise itself is simply one huge enterprise. Sometimes such companies are organized under the control of and with the participation of the regional or local administration. In the majority of cases, however, a large farm operation is a purely private initiative. Management structure differs tremendously from company to company. Land tenure arrangements also vary: a

company may own huge areas, but more often they rent land shares that make up huge areas.

Thus, the land share system provided large farm companies with easy access to land. If the farmland had been divided into physical plots during the land reform, the big companies, which each now lease hundreds of thousands of hectares in several regions, would need to divert their finances from investments in productive activities to investments in land consolidation. Under current arrangements they can accumulate a large number of leased shares and then claim the lands of the corresponding farm enterprises for allocation in physical form, which allows them to get these lands in big fragments. Also the land share lease provides the local rural population with a certain level of subsistence. Given that about 60 percent of land shares belong to the elderly, rental of land shares provides an additional safety net system in rural areas.

So in the initial stages of reform, the agricultural system in Russia changed dramatically. As Figure 1 shows, currently 65 percent of farmland in Russia is privately owned (if land shares are considered private ownership) and 38 percent is owned by the state and municipalities.

Figure 1: Farmland Ownership Structure in Russia, January 1, 2004 (%)



Source: Shagaida 2005

As in many other post-communist countries, Russia's agriculture is based on three types of production units: (1) large-scale farm enterprises, the successors of *kolkhozes* and *sovkhozes* and various related farming companies; (2) individual farms, which are presumably possessed and run by one family; and (3) household plots of the rural and, to a minor extent, the suburban and urban population (these are tiny plots of land presumably used for subsistence food production, with some sales of surpluses over family needs). These types of production units are legally defined mainly by their form of registration. Large-scale farms are incorporated in one form or another; individual farms are specifically registered as such; and household plots, which are exempt from both business registration and taxation, are defined in terms of the documented allotment of a physical plot of land.

Weak legal and statistical definitions of these three types of farming entities do not allow them to be distinguished by physical size and economic turnover. Thus, some individual farms operate 3,000–5,000 hectares and employ more than 100 people, making them comparable in size to the typical Russian incorporated farm. On the other hand, some individual farms have no land under cultivation or pasture but are registered as individual farms and count as such in the statistics. According to the 2006 Agricultural Census, more than 30 percent of individual farms in Russia operate more than 2,000 hectares of farmland, whereas 17 percent have no land at all. In addition, there is little difference in actual ownership between these two

types. A "large-scale" farm can be controlled by a single individual, whereas an "individual farm" is often owned as a partnership or even owned jointly and severally by unrelated persons. Because household plots are exempt from taxation, many owners of market-oriented small farms pretend that they own household plots, although in reality they cultivate 50–100 hectares of arable land.

Household plots accounted for more than half of total agricultural output in 2000, up from 30 percent in 1990. "Households," however, is not a homogeneous category: it amalgamates a number of dissimilar producers. From 40 to 70 percent of households generated barely 5 percent of the gross agricultural output of the corresponding county. These are very small subsistence farms with an average of 0.06 hectare and two head of cattle. The top 20 percent of households in some areas produce up to 25 percent of the gross agricultural output of the corresponding county, and these farms have an average of 30–40 hectares and sometimes exceed 100 head of cattle (Serova 2006). These latter farms are considered household plots but are presumably run by market-oriented, commercial producers who do not register as individual farms in order to avoid taxation and to obtain concessional services from an adjacent, large-scale "mother" farm.

Problems with Reforms

The agrarian reform of the 1990s led to a number of problems for the further development of the sector.

First, the reform led to a situation in which agricultural businesses and the land operated by the businesses belonged to different groups of owners. The farming companies leased their lands from a large number of land shareholders. An individual land shareholder could break a rent contract at almost any time, making agribusiness risky and discouraging agribusinesses from making land improvements and long-term investments. Also, the process of collecting shares and contracting with such a large number of holders increased the farming companies' transaction costs. Thus, for an operation of 100,000 hectares (a common size for large agricultural companies in southern Russia), the managers had to arrange legal contracts with about 15,000–20,000 people. The lack of a well-functioning legal system made registration procedures a nightmare for involved parties (Shagaida 2005).

Second, the fact that agribusinesses did not own the land prevented them from using it as collateral for bank loans, thereby reducing the potential of agriculture to attract borrowed capital for long-term investment projects.

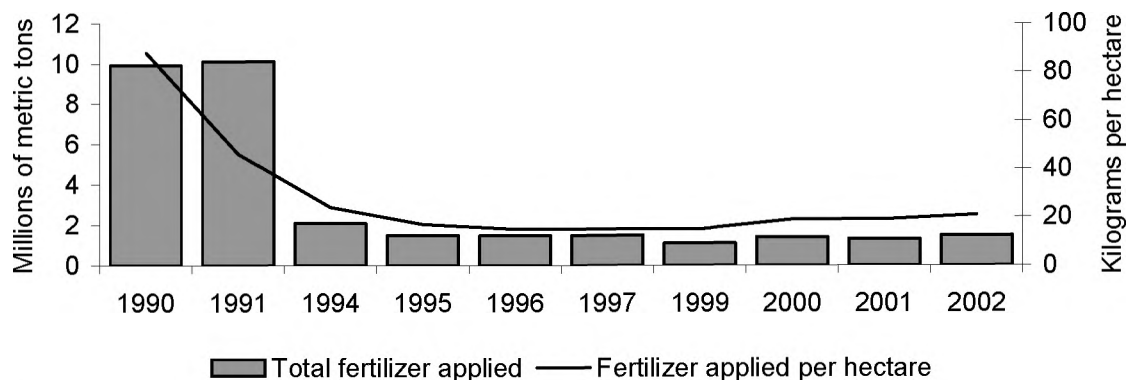
Third, because of the land share system, a buyer who purchased a large farm enterprise did not know the final result of his or her purchase. In the formal deal only nonland assets could be acquired; land arrangements remained uncertain. After purchasing the farm, the new owners have to arrange new land lease contracts with all of the land shareholders. This system generated much uncertainty

for would-be investors and discouraged them from making purchases.

Together, these three problems significantly reduced the capital inflow to agriculture, which desperately needed investment for modernization, and hampered the sector's potential growth. Agricultural productivity, low during the Soviet era, deteriorated even further during the transition period because of a financial crisis that led to severe decapitalization of farms and dramatic reductions in input use, as illustrated by fertilizer use (Figure 2).

Fourth, the conditional nature of the land shares helped the land turnover mechanism, but also set up insoluble problems for land registration. The physical plot allotted for the purpose of renting a particular land share could be identified differently depending on the entity that rented this land. Thus, if a land shareholder rented his or her share for a year to a farmer located in the same village, then a physical plot near this village would be allotted. If the same land shareholder rented his or her share the following year to a large farming company that set up its operation in a remote area, then the physical plot would be allotted close to this operation. This system was a disaster for maintaining a land registry, but land registration is a necessary element of transparent and efficiently functioning land market (Shagaida 2005).

Figure 2: Mineral Fertilizer Use, 1990–2002



Source: Serova and Shick 2005.

Now policy makers in Russia are faced with the challenge of further reforming the land tenure system within the given farm structure.

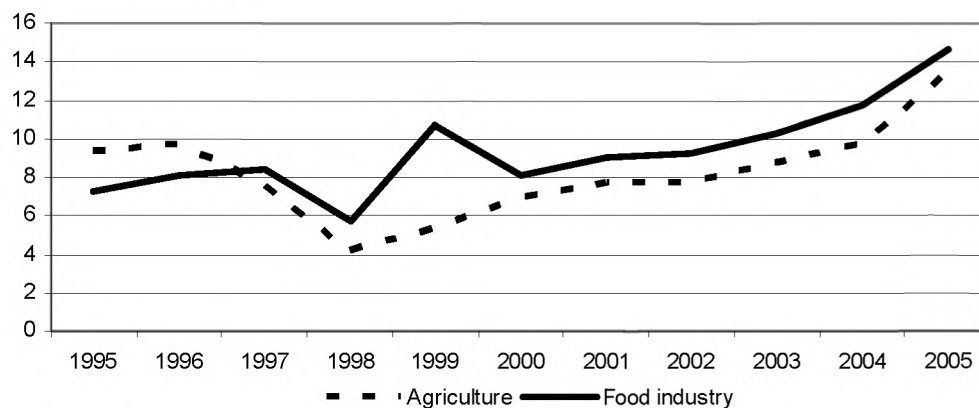
Stakeholders

Many groups of interests with different political power are involved in solving the land tenure problem in Russian agriculture. One of the major stakeholder groups consists of the owners of big farming enterprises. Since 1998 Russia's agriculture has grown quickly and attracted investment from outside the sector (Figure 3). The external investors are interested in easier access to land, given the current long and costly process of leasing small shares from thousands of holders. These external investors belong to the strongest financial and

industrial groups in the Russian economy, including the largest mineral oil companies, metallurgy companies, railways, and banks. These companies have substantial lobbying power and can promote political decisions in their favor.

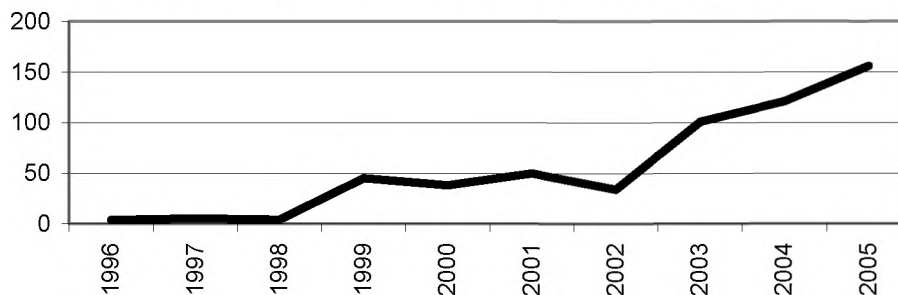
Apart from domestic investors, there are growing investments from international companies into the Russian agrifood sector and primary agriculture (Figure 4). Foreigners are not allowed to own farmland in Russia, in accordance with Russian legislation, but they can be the co-owners of farming enterprises with Russian partners who do own land. Thus, foreign agribusiness investors in Russia are also interested in consolidating land in the equity of farming enterprises and in simplifying large investors' access to land.

Figure 3: Direct Investments in the Agrifood Sector in Russia, 1995–2005 (billions of rubles in constant 1995 prices)



Source: Calculated from Federal State Statistics Service data.

Figure 4: Foreign Investments in Agriculture in Russia, 1996–2005 (millions of U.S. dollars)



Source: Calculated from Federal State Statistics Service data.

Another group of stakeholders consists of owners of individual farms, which vary dramatically by physical and economic size. The biggest individual farms accumulate their lands by renting shares, just as the big farming enterprises do, and therefore they have the same interest in land tenure development. Politically, however, the owners of individual farms are poorly organized and can hardly lobby for their interests.

The land shareholders constitute the most numerous group of stakeholders in this process, but they are extremely heterogeneous. Some shareholders have already made their decision about how to dispose of the shares. They had a choice between withdrawing with their physical plot and establishing their own farm, renting or selling their share, or contributing the share to the equity of a farming enterprise. Most of the land shares have been transformed into plots during the years of reform. Thus, future reform of land legislation can affect only those shareholders whose shares are rented out and whose rights to these shares can be truncated by changes in legislation. The shareholders are disconnected geographically, have no political unity, and probably will not be able to argue strongly for their interests.

There is one more group of stakeholders that includes the officers of the national land registry and the employees of the commercial land engineering companies and land consulting companies. Complicated procedures for registering land transactions create demand for the services of private consultants and land engineers. Moreover, these procedures also lay the foundation for rent-seeking activities by government officers involved in the land registration process. This group will likely oppose radical changes in the system.

Policy Options

The first and most obvious option, which was partially implemented in legislation of the early 2000s, is to stop renting land shares. Before rental, the conditional land share should be withdrawn from use by the parent farm, identified on the ground, and registered as a physical plot. Only after that should it be rented out. If several land shareholders are intending to rent their plots

together to the same renter, they should undertake land consolidation.

A consequence of this option is that individual shares are not requested for rent because the big farming companies are the major leasers of the land shares. Land shareholders thus actually lose the right of individual rent. Most often the entire group of co-owners of land within one former *kolkhoz* or *sovkhos* rents its shares out together. Individuals lose their share of the rent payments because the group decides collectively how to use these receipts. As a result the safety net role of the land share system is destroyed. In addition, the leaders of the group get a special role in the rent negotiation process, a practice that clears the way for fraud and rent-seeking activity (or “under the table” deals) that also reduce rent revenues for the ordinary land shareholders.

On the other hand, the legal requirements for preliminary land allotment, identification on a map, and registration increased the transaction costs for land rental enormously. These costs are not affordable for the shareholders and usually are undertaken by the leasers, who are large companies. These companies thus face increased costs to gain access to land and consequently a reduction of potential investments in production.

New land legislation in the early 2000s made land turnover much more difficult. Today, big investors tend to buy farm operations from other big companies that have completed all the necessary legal arrangements or from the state or municipalities.

Other debated policy options are related to the different ways of depriving land shareholders of their ownership. There is a certain rationality to this seemingly unfair proposal. Many agricultural enterprises are in serious need of investment. Around 40 percent of farm enterprises in Russia consistently operate at a loss. Consequently the wages of employees on such farm enterprises are low and irregularly paid; furthermore the poor performance of these enterprises leads to the deterioration of the entire rural infrastructure around them and a decline in the living standards in nearby villages. Under these circumstances land shareholders do not get the benefits of their land ownership. Consolidation of their lands in the

equity of farm enterprises could make these enterprises more attractive for external investors. The inflow of investments and better management could improve not only farm performance and employee wages, but also rural life in the surrounding area. So even if they lose the property rights associated with their land shares, the shareholders could ultimately benefit anyway.

The Constitution and general principles of justice do not, however, allow policy makers to truncate the rights of the citizens once given. In the reform process 12 million rural dwellers received land shares. Some of these shareholders disposed of their shares successfully: some established their own farms and run them efficiently; some invested their shares in well-performing big farm enterprises and receive dividends or rent; some sold their shares and used the capital for other purposes. How successfully shareholders were able to dispose of their land shares did not depend exclusively on personal choice; much was determined by the region where the share was located (in marginal areas there were few options for using land shares efficiently), by the performance of the parent farm enterprise, by regional policy (in some regions share allocation was postponed by the local administration), and other factors. Under such circumstances it would be unfair and politically unacceptable to dispossess all these shareholders. Thus the major political challenge on this issue in Russia is achieving a compromise between the efficiency of agriculture and social justice in rural areas.

Assignment

Your assignment is to find a political solution that will (1) make agriculture attractive for investors (domestic and international) by simplifying land transaction procedures, and (2) secure the rights of rural dwellers who received land shares through the reforms. Take into account the farm structure and land tenure systems that emerged in Russia after the agrarian reforms of the 1990s, current stakeholders' interests and the distribution of political forces in Russia, and the possible opposition to change by rent seekers in the land registration system.

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